

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P749140

Luminaire Tested: LD4D50D010-EU4DR3040509040-4LBDP1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P749140
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/30/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LD4D50D010-EU4DR3040509040-4LBDP1B
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4024.6 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

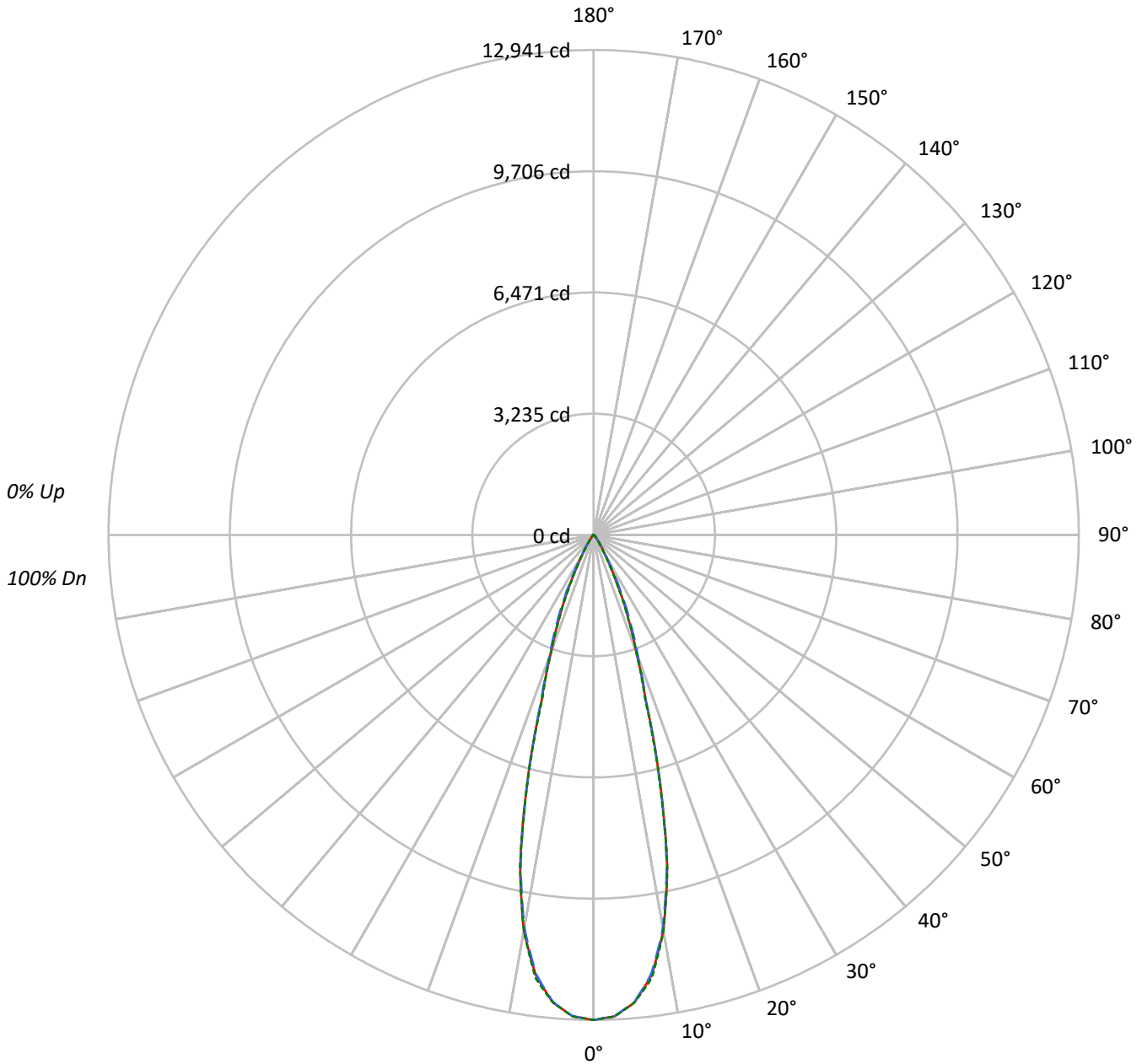
Input Watts (W): 47
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



Downlight

TEST NUMBER: P749140
CATALOG NUMBER: LD4D50D010-EU4DR3040509040-4LBDP1B

Luminous Intensity Polar Plot





TEST NUMBER: P749140

CATALOG NUMBER: LD4D50D010-EU4DR3040509040-4LBDP1B

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85																			
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82																			
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	990556	990556	990556
5°	962122	961000	962168
10°	833343	827467	833149
15°	543714	540798	538080
20°	270360	280509	270001
25°	136194	153575	133399
30°	54525	59412	47507
35°	25295	24220	20305
40°	10921	12130	10282
45°	7707	9558	7772
50°	2644	6966	2798
55°	1521	2883	1615
60°	1072	1271	1072
65°	688	688	688
70°	425	291	425
75°	0	177	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9558 cd/sqm



TEST NUMBER: P749140

CATALOG NUMBER: LD4D50D010-EU4DR3040509040-4LBDP1B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1138.0	28.3
10°-20°	1832.7	45.5
20°-30°	792.0	19.7
30°-40°	180.5	4.5
40°-50°	62.0	1.5
50°-60°	15.1	0.4
60°-70°	3.9	0.1
70°-80°	0.4	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3762.7	93.5
0°-40°	3943.2	98.0
0°-60°	4020.3	99.9
0°-90°	4024.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4024.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12941	12941	12941	12941	12941	
5°	12522	12510	12507	12533	12522	1139
15°	6861	6779	6824	6802	6790	1837
25°	1613	1674	1818	1631	1580	772
35°	271	276	259	257	217	184
45°	71	88	88	88	72	51
55°	11	12	22	13	12	11
65°	4	4	4	4	4	4
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P749140

CATALOG NUMBER: LD4D50D010-EU4DR3040509040-4LBDP1B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12941.1	12941.1	12941.1	12941.1	12941.1
2.5°	12855.3	12846.5	12851.5	12857.9	12860.4
5°	12521.8	12509.7	12507.2	12533.2	12522.4
7.5°	11848.9	11831.8	11805.7	11864.8	11920.1
10°	10721.8	10702.7	10646.2	10674.1	10719.3
12.5°	9057.8	8996.1	8994.9	9083.8	9071.7
15°	6861.3	6778.7	6824.5	6802.2	6790.2
17.5°	4614.0	4582.3	4643.3	4624.8	4545.4
20°	3319.1	3327.4	3443.7	3385.2	3314.7
22.5°	2422.0	2451.9	2589.7	2439.2	2383.9
25°	1612.6	1673.6	1818.4	1631.0	1579.5
27.5°	991.8	1019.8	1166.5	979.1	951.1
30°	616.9	603.0	672.2	576.9	537.5
32.5°	404.7	386.9	409.2	367.2	335.5
35°	270.7	276.4	259.2	257.3	217.3
37.5°	169.0	194.4	171.5	183.0	139.8
40°	109.3	141.1	121.4	134.1	102.9
42.5°	89.6	108.6	99.8	106.1	91.5
45°	71.2	88.3	88.3	88.3	71.8
47.5°	39.4	59.1	75.6	60.4	41.9
50°	22.2	29.9	58.5	31.1	23.5
52.5°	15.2	17.2	40.0	17.8	15.9
55°	11.4	12.1	21.6	12.7	12.1
57.5°	8.9	9.5	11.4	9.5	8.9
60°	7.0	7.0	8.3	7.6	7.0
62.5°	5.1	5.1	5.7	5.1	5.1
65°	3.8	3.8	3.8	3.8	3.8
67.5°	1.9	2.5	2.5	2.5	2.5
70°	1.9	1.3	1.3	1.3	1.9
72.5°	1.3	0.6	0.6	0.6	0.6
75°	0.0	0.0	0.6	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report





— 0°-180° - - 45°-225° - - - - 90°-270°

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)